REMARKS

I. Status of the claims

Claims 1, 3, 4, 6, and 13-15 are pending. Claims 2, 5, 7, 9, and 10 have been cancelled. Withdrawn claims 8, 11, and 12 have also been cancelled to expedite prosecution of this application.

Claim 1 has been amended to include the recitations set forth in original claims 2 and 9, with the following qualifications. The phrase "where any of X^1, X^2, X^3 and X^4 are nitrogen atoms, the nitrogen atoms do not have the atom or group thereon" originally recited in claim 9 has been clarified in claim 1 to recite "when any of X^1, X^2, X^3 and X^4 are nitrogen atoms, the corresponding R^4, R^5, R^6 or R^7 bonded to the nitrogen atom is absent." The phase "an atom or a group which does not participate in the reaction" has been replaced with a list of atoms and groups disclosed in the specification at page 8, lines 1 to 29. The phrase "R^4, R^5, R^6 and R^7 can form a ring in optional combinations" has been deleted. Formula (3) for the nitrogen atom-containing compound has also been deleted.

Other minor amendments have been introduced to conform the claims to standard U.S. patent practice. New claims 13 and 15 are directed towards the preferred organic acid compounds listed in the working examples. New claim 14 represents a preferred embodiment of claim 1, as recited in original claim 10. No new matter has been introduced through these amendments and new claims.

II. Claim objections

The examiner has objected to claim 9 as not being further limiting of claim 1. Claim 9 has been cancelled in this response.

III. Rejections under 35 U.S.C. § 112, second paragraph

The examiner has rejected claims 9 and 10 under 35 U.S.C. § 112, second paragraph based on the phrase "has the meaning as defined above." As introduced in claim 1, the phrase refers to the earlier recitation of the variable, which now appears in the same claim. Applicants respectfully submit that the phrase, as recited in claim 1, is not vague.

The examiner has also rejected claims 9 and 10 under 35 U.S.C. § 112, second paragraph based on the phrase "does not participate in the reaction." When introducing the recitation of

claims 9 and 10 into claim 1, Applicants have removed the objected-to phrase. Applicants have replaced the phrase to clarify that R^4, R^5, R^6 or R^7 may be absent, particularly in instances when the corresponding X^1, X^2, X^3 and X^4 variables are nitrogen atoms.

Applicants respectfully request that the examiner withdraw these rejections under 35 U.S.C. § 112, second paragraph in view of these amendments and remarks.

IV. Rejection of claims 1-7, 9, and 10 as being anticipated by Gakhar

The examiner has rejected claims 1-7, 9, and 10 under 35 U.S.C. § 102(b) as being anticipated by the article by Gakhar et al. entitled "1,3-Dioxolo[4,5-g] quinazolines" J. Indian Chem. Soc., 1987, vol. 64, no. 6, p. 373-375 ("Gakhar").

The quinazoline compounds described in Gakhar are 1,2-dioxolo[4,5-g]quinazolines. As amended in claims 1 and 14, the claimed invention relating to pyrimidin-4-one compounds is not disclosed by Gakhar. Applicants respectfully request that the examiner withdraw this rejection under 35 U.S.C. § 102(b).

V. Rejection of claims 1, 5-7, 9, and 10 as being anticipated by Rad-Moghadam

The examiner has rejected claims 1, 5-7, 9, and 10 under 35 U.S.C. § 102(b) as being anticipated by the article by Rad-Moghadam et al. entitled "One-pot Snythesis of Substituted Quinazolin-4(3H)-ones under Microwave Irradiation" J. Chem. Res., Synopses, 1998, no. 11, p. 702-703 ("Rad-Moghadam").

In Rad-Moghadam, the reaction is performed under microwave irradiation. See abstract. In contrast, the method recited in the claimed invention is performed in an organic solvent. The claim limitation relating to performing the reaction in an organic solvent was originally recited in claim 2, a claim that the examiner did not reject based on the teachings of this reference. Thus, the amended claims, which incorporated the limitations of original claim 2, are not be anticipated by Rad-Moghadam. Accordingly, Applicants respectfully request that the examiner withdraw this rejection.

VI. Rejection of claims 1-5, 7, 9, and 10 as being anticipated by Tobe

The examiner has rejected claims 1-5, 7, 9, and 10 under 35 U.S.C. § 102(b) as being anticipated by the article by Tobe et al. entitled "Discovery of Quinazolines as a Novel Structural

Class of Potent Inhibitors of NF-kB Activation" Bioorganic & Med. Chem., 2003, vol. 11, no. 3, p. 383-391 ("Tobe").

In Scheme 2 on page 385 of Tobe, an aminocarboxylic acid compound (7) is processed using EDC and HOBr in 28% aqueous ammonia solution to give a benzamide compound (compound 8), which is then processed using $HC(OMe)_3$ to give a quinazoline compound (compound 9). See description synthetic pathway of Scheme 2 on p. 384.

Thus, the reaction of Tobe contains two separate reaction steps. In contrast, the method of the claimed invention recites only one reaction step.

The examiner additionally states that Tobe does not disclose the solvent in which the ammonia solution was purchased. The examiner concludes, "thus, inherently ammonia solutions can be purchased at Sigma-Aldrich in ethanol." Applicants respectfully disagree.

Tobe explicitly describes the use of a 28% aqueous ammonia solution. See the description of Scheme 2 appearing on p. 385 beneath the scheme. Therefore, Tobe does not teach an ethanolic ammonia solution or any other organic solvent.

For these reasons, Tobe fails to teach Applicants' claimed invention, and Applicants respectfully request that the examiner withdraw this rejection.

VII. Rejection of claims 1-7, 9, and 10 as being obvious over Nishino

The examiner has rejected claims 1-7, 9, and 10 under 35 U.S.C. § 103(a) as being unpatentable as being obvious over Japanese Application No. JP 2003-212862 to Nishino et al. ("Nishino").

The examiner states "Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. § 102(e)." However, 35 U.S.C. § 102(e) requires the reference to be either a published U.S. patent application (§ 102(e)(1)) or a granted U.S. patent (§ 102(e)(2)). Nishino, a Japanese application, is neither. Therefore, Nishino does not qualify as prior art under 35 U.S.C. § 102(e).

Nor does Nishino qualify as prior art under any other section of 35 U.S.C. § 102. Nishino was published on July 30, 2003. The international filing date (recognized as the effective U.S. filing date) of this application is June 18, 2004. Priority is claimed under 35 U.S.C. § 119 to five priority documents, among them JP 2003-172873, filed June 18, 2003, and

JP 2003-179077, filed June 24, 2003. JP 2003-172873 provides support for independent claim 14, and JP 2003-179077 provides support for independent claim 1.

Accordingly, Nishino does not qualify as prior art to this patent application, and Applicants respectfully request that the examiner withdraw this rejection.

VIII. Obviousness-type double patenting

The examiner has rejected claims 1-7, 9, and 11 on the grounds of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4 of U.S. Patent No. 7,232,903. The examiner has also provisionally rejected claims 1-7, 9, and 11 on the grounds of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 4, 6, 8, 9, 16-19, 33, and 34 of copending U.S. Application No. 10/502,734.

With this response, Applicants file terminal disclaimers over the patent and patent application noted above. In view of the terminal disclaimers, Applicants respectfully request that the examiner withdraw these obviousness-type double patenting rejections.

IX. Conclusion

Except for issue fees payable under 37 C.F.R. §1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. §§1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account No. 19-2380.

This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF TIME** in accordance with 37 C.F.R. §1.136(a)(3).

Date: August 18, 2008

Respectfully submitted,

/Jeffrey N. Townes, Reg. No. 47,142/
Jeffrey N. Townes

NIXON PEABODY LLP
401 9th Street, N.W.
Washington, D.C. 20004-2128
(202) 585-8000